

## REMARKS

Reconsideration of the application identified in caption in light of the remarks which follow is respectfully requested.

In the Official Action, claims 1-7, 9-13 and 15-22 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,140,076 (*Hatsuda et al*), as evidenced by <http://www.wovenwire.com/reference/particle-size.htm> (*Screen Technology Group*). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Independent claims 1 and 2 recite a particulate water retaining material for cultivating plant. Independent claims 17-19 recite a method for the production of a water retaining material for cultivating plant.

*Hatsuda et al* relates to a method of treating the surface of an absorbent resin by crosslinking the surface region of the absorbent resin homogeneously and effectively using a crosslinking agent. See col. 1, lines 8-12.

It is well established that in rejecting claims under 35 U.S.C. §103, it is incumbent upon the Patent Office to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Office must make the factual determinations set forth in *Graham v. John Deere Co.*, 148 USPQ 459, 467 (1966). "[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability." *In re Oetiker*, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007), citing *In re Kahn*, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).

In the present case, *Hatsuda et al* does not disclose or fairly suggest each feature recited in independent claims 1, 2 and 17-19. For example, *Hatsuda et al* does not disclose or fairly suggest a water retaining material for cultivating plant comprising (B) a polyvalent metal compound, as is presently recited in the independent claims. Applicants respectfully but strenuously submit that upon a fair and complete reading of the *Hatsuda et al* disclosure, the ordinarily skilled artisan would not have arrived at such claimed water retaining material.

In this regard, the Patent Office has relied on *Hatsuda et al* for disclosing the use of an absorbent "as a water-proofing agent for agriculture and horticulture" at column 10, lines 48-49; and the use of "polyvalent metal compounds such as salts" at column 4, lines 39-41. It is important to note, however, that such polyvalent metal compounds are disclosed in an extensive laundry list of cross-linking agents at column 10, lines 13-41 of *Hatsuda et al*. As well, the disclosed water-proofing agent is but one of several exemplary applications disclosed at column 10, lines 44-49 of *Hatsuda et al*. The Patent Office has not provided adequate reasoning as to why the ordinarily skilled artisan would have fortuitously selected the polyvalent metal compounds and water-proofing agent from such extensive lists disclosed by *Hatsuda et al*. Simply put, it would not have been obvious to the ordinarily skilled artisan to pick and choose from the various disclosures of *Hatsuda et al* to arrive at the claimed water retaining material.

Respectfully, the Examiner has not clearly articulated the reason(s) why the claimed water retaining material would have been obvious. Such articulating reasoning with some rational underpinning is required in view of *KSR*. In the present case, however, the Examiner has merely relied on general disclosures of extensive lists of alternatives, and has not provided adequate rationale as to why it would have been

obvious to the ordinarily skilled artisan to pick and choose from the various disclosures of *Hatsuda et al* to arrive at the claimed water retaining material.

As discussed in the instant specification, by employing an exemplary aspect of the present invention, for example, a water retaining material can be obtained having acceptable water-absorbent and plant growth-enhancing performance. *Hatsuda et al* fails to have any recognition or suggestion of the technical problems associated with obtaining a material having both acceptable water-absorbent and growth-enhancing performance, let alone a water retaining material having such acceptable characteristics.

Furthermore, "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (emphasis added). "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent feature necessarily flows from the teachings of the applied prior art." *Ex Parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

In the present case, the Patent Office has not established with the requisite certainty that the absorbent material of *Hatsuda et al* inherently exhibits an absorption capacity in deionized water for 10 minutes in the range of 20 - 500 g/g, as recited in claim 1. As can be seen from the examples set forth in the instant specification, various comparative examples which are comparable to the materials disclosed by *Hatsuda et al* exhibited absorption capacity characteristics outside of the claimed range. *Hatsuda*

*et al* is completely silent concerning such absorption capacity characteristic, and has no recognition or suggestion of the significance of such characteristic, for example, in attaining a water retaining material having good plant cultivation performance.

*Screen Technology Group* fails to cure the above-described deficiencies of *Hatsuda et al*. In this regard, the Patent Office has relied on *Screen Technology Group* for relating mesh size to particle size. See Official Action at page 4. However, even if *Screen Technology Group* would have been combined with *Hatsuda et al* in the manner suggested by the Patent Office, the resulting combination nevertheless fails to disclose or fairly suggest a water retaining material for cultivating plant comprising (B) a polyvalent metal compound, as is presently recited in the independent claims.

For at least the above reasons, the claims are non-obvious over *Hatsuda et al* and *Screen Technology Group*. Accordingly, withdrawal of the §103(a) rejection is respectfully requested.

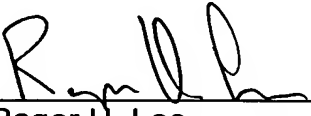
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited. If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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